

MADSEN RED LAKE GOLD MINES

L I M I T E D

AR07



1959

ANNUAL REPORT



1

10



2

11



3

12



4

13



5

9

14



15

A rare collection of gold coins from practically every country in the world is displayed on the cover. Only a few have been singled out for descriptive purposes. The world's first gold coins were struck about 700 B.C. Gold coins have been one of mankind's most treasured possessions. Experience has shown that due to wars, inflation and deflation, paper money has depreciated but gold and gold coins have either maintained their price consistently or increased in value.

The complete set of \$5.00 and \$10.00 Canadian gold coins minted in 1912, 1913 and 1914, shown in the top row, is unknown to many Canadians of this generation. Its present value is \$400.00. These coins were circulated until 1933 when Canada followed the example of the United States by calling in gold coins and the few which remain, are mostly in the hands of the collectors.

No. 1 — Peru — 50 Soles. This issue was minted especially for bullion purchasers. The years of issue were 1950 - 1956. Present value \$45.00.

No. 2 — Peru — 8 Escudos. This is commonly known as a gold doubloon of pirate days. The years of issue were 1771 - 1807.

No. 3 — Great Britain — Hammered coinage.

No. 4 — The Queen Elizabeth II Sovereign. This is the most popular gold coin in the world except in certain Mid-Eastern countries where female heads are spurned due to religious prejudice. The British Government issued this coin in 1957 to combat the counterfeiting of sovereigns in Italy and Switzerland. Demand was so great that reissues were made in 1958 and 1960. All are for export and used principally by the merchants trading in areas of unstable currency as well as gold hoarders.

No. 5 — is a gold coin from one of the Indian native states.

No. 6 — United States — \$1.00 gold coin. Years of issue were 1849 to 1854. Present value \$15.00.

No. 7 — Japan — 5 Yen.

No. 8 — United States — \$2 1/2. The years of issue were 1908 - 1929. Present value \$10.00.

No. 9 — Venice — 1 Ducat.

No. 10 — United States \$20.00 gold coin. This coin was minted in 1849 following the discovery of gold in California. In 1907 President Roosevelt commissioned Augustus St. Gaudens to redesign United States coinage. Consequently, from the aesthetic side, this was the most beautiful coin in the United States. During the period 1849 to 1933, 174,000,000 pieces were issued. Present value \$45.00.

No. 11 — Mexico — 50 Pesos. Centennial of Independence. Years of issue 1921 - 1931 and 1943 - 1949. Present value \$50.00.

No. 12 — United States \$5.00 gold coin. Years of issue were 1795 - 1807. This was the first gold coin struck for the United States. Present value \$72.50.

No. 13 — Russian Rouble.

No. 14 — Roman.

No. 15 — Japan — 1 Tael.

In recent years Great Britain, South Africa, Austria and many other countries have been minting gold coins at an increased rate to meet the demand. Ironically enough, Canada still continues to ignore the opportunity to dispose of substantial quantities of this precious metal through the channel of coinage.

DIRECTORS AND OFFICERS

DIRECTORS	JOSEPH McDONOUGH, Toronto, Ont. MARIUS MADSEN, Toronto, Ont. FRED R. MARSHALL, Q.C., Toronto, Ont. HORACE G. YOUNG, M.E., McKenzie Island, Ont. A. H. SEGUIN, Toronto, Ont. S. J. BIRD, C.E., Toronto, Ont. HUGH H. MACKAY, Toronto, Ont.
OFFICERS	JOSEPH McDONOUGH, President FRED R. MARSHALL, Q.C., Vice-President MISS M. MASTERSON, Secretary-Treasurer
GENERAL MANAGER	E. G. CRAYSTON, P.Eng., Madsen, Ont.
CONSULTANT	DR. E. G. BISHOP, Georgetown, Ont.
REGISTRARS AND TRANSFER AGENTS	GUARANTY TRUST COMPANY OF CANADA 366 Bay Street, Toronto, Ont. 610 St. James Street West, Montreal, Que. THE BANK OF NEW YORK 48 Wall Street, New York 15, N.Y.
AUDITORS	NEFF, ROBERTSON & STONE 112 Yonge Street, Toronto, Ont.
HEAD OFFICE	55 Yonge Street, Toronto, Ont.
MINE OFFICE	Madsen, Ont.
ANNUAL MEETING	May 2nd, 1960, 11 o'clock in forenoon (Toronto Time) Elizabeth Room — King Edward Sheraton Hotel



Summary of Results for the years 1959 and 1958

	1959	1958
Tonnage	301,999	302,200
Ounces Gold Produced	118,804.674	123,488.940
Average Price of Gold per oz.	\$ 33.68	\$ 33.94
Gross Income	\$ 4,019,616.83	\$ 4,210,606.14
Costs	\$ 2,943,580.62	\$ 2,630,449.37
Operating Profit	\$ 1,076,036.21	\$ 1,580,156.77
Interest	\$ 40,651.28	\$ 42,476.74
Depreciation	\$ 273,712.65	\$ 271,409.12
Taxes	\$ 27,080.00	\$ 299,500.00
Net Profit	\$ 815,894.84	\$ 1,051,724.39
Dividends per share	\$.20	\$.20
Net Working Capital (end of year) ...	\$ 1,783,072.14	\$ 1,979,202.81

Review of the Year

By the Directors

To the Shareholders:

Your Directors submit with pleasure the Twenty-Fourth Annual Report for the year ended December 31st, 1959, including a review of operations by the General Manager, Mr. E. G. Crayston, and the Auditors' Financial Statements.

FINANCIAL

In its twenty-first year of production, bullion income was \$4,019,616.83 compared with \$4,210,606.14 in 1958. The tonnages of ore mined in the two years were practically identical. Decline in production of \$190,989.31 was due principally to a lower grade of ore milled. A decrease in the average price received per ounce of gold was also a factor. Receipts per ounce during the current year averaged \$33.68 in contrast with \$33.94 in 1958. Even so, the company gained by electing to sell its gold in the free market and in so doing, made a profit of \$25,318.76.

Operating profit was affected adversely by a combination of factors. Included in these were increased costs inherent in the company's accelerated exploration program, higher basic wage rates and the price of supplies. In consequence, after capitalizing shaft sinking expenditures of \$126,957.06, net profit equalled 23 cents per share, or \$815,894.84. These earnings compare with 30 cents per share, or \$1,051,742.39 in the year 1958.

Interest and capital gain grossed \$42,601.28.

The same rate of dividends was paid as in the previous year. Two half-yearly payments were made, each of 5 cents plus a bonus of 5 cents or 20 cents per share. The total dividend disbursements amounted to \$699,905.60. This sum was 17% of bullion income or 64% of profits after taxes.

Reference was made in last year's report to the authorization by the Directors implementing a contributory Pension Plan to become effective January 1st, 1959. The Plan was approved and registered with the Department of National Revenue at Ottawa during the latter part of the year. While this irrevocable Pension Trust Fund is separate and distinct from the accounts of the company, the financial standing is outlined for the information of the shareholders. At December 31st, 1959, government bonds, other marketable securities and mortgages in the hands of the Trustee, The Guaranty Trust Company of Canada, aggregated \$228,175.24. Contributions by the company, including past service cost of \$180,000.00 totalled \$203,842.50 during the year. Contributions by the employees amounted to \$21,364.66. Income from investments was \$8,550.51. No pension benefits were paid in the year. The supervision of investments was placed in the hands of a Retirement Committee consisting of Mr. Joseph McDonough, Mr. A. H. Seguin, Mr. Hugh H. Mackay, Mr. E. G. Crayston and Miss M. Masterson.

Provision for income taxes was \$27,080.00 compared with \$299,500.00 in 1958. The rate of federal income tax was increased by 3% in 1959. Additional taxes of \$77,000.00 would have been required if the total amount of \$180,000.00 for past service cost had not been a deductible item in the year of the payment. However, this item will be amortized over a ten-year period.

Again reflecting the non-repetitive full past service cost of the Pension Plan, the net working capital showed a decrease of \$196,130.67. At December 31st, 1959, it was \$1,783,072.14 in contrast to \$1,979,202.81 at the end of 1958.

Capital expenditures during the year amounted to \$282,926.74 compared with \$181,438.60 before disposals in 1958. Investments in fixed assets at December 31st, 1959, were \$4,717,563.52. Depreciation which was taken at the rate of 20%, amounted to \$273,712.65. Net plant at the end of the year was \$1,094,850.57.

Embodied in the Report is a statistical review outlining the progress of the company during the ten-year period 1950-1959.

Negotiations for the renewal of the Union contract with the United Steelworkers of America were in progress at the year end. Inexperience was still the dominant factor in a generally unstable labour supply.

DEVELOPMENT

The shaft deepening program has been completed. Six new levels are available for exploration. Development is advanced farthest on the 18th level. Here a line drive will be carried for a distance of 5000 feet east of the shaft. It is expected that a major portion of this project will have been accomplished by the end of 1960. At December 31st, 1959, the heading was some distance from the west end of the ore zones and detailed drilling of the potential areas was expected to begin in the second quarter of 1960. Other levels will be driven out as, and when, the completion of ore and waste passes permits the work to proceed.

Exploration during the year resulted in the discovery of new ore in an area extending from 4200 feet to 4800 feet east of the shaft. The ore was outlined by diamond drilling from a drive on the 16th level. Indications are that this exploratory work is in the upper portion of the zone.

The new ore is of the Austin type and is the third aggregate of ore lenses discovered in that tuff. Its downward extension is expected to pass into the Redwood claims which were purchased by the company in the year 1950 for \$365,500.00.

Ore reserves at the year end totalled 604,150 tons of an average grade of 0.330 oz. The Annual Report for 1958 anticipated some decrease in reserves during 1959. Actually the decrease was only 40,040 tons. The deepest ore taken in reserves extended to a depth of 50 feet below the 17th or bottom working level. Indicated tonnage in the new ore zone at the east end of the 16th level has not been included. The grade of reserves was the same as that of the previous year.

OUTSIDE EXPLORATION

Outside exploration activities were limited. Expenditures amounted to \$16,944.95. Three groups in New Brunswick, comprising 135 claims, were allowed to lapse with a consequent write off totalling \$116,205.76. An interest was taken in other groups in that Province, aggregating 90 claims.

A minor interest in the exploration of an area in the Noranda district of Quebec was undertaken in association with Norque Copper Mines Limited. At the year end negotiations were underway with Murray Mining Corporation Limited relative to the exploration and development of an asbestos-bearing zone in Northeastern Quebec. Subsequently an option was exercised involving the purchase of 100,000 shares of that company.

Your Directors wish to express their appreciation for the loyal and able services rendered during the year by your General Manager, Mr. E. G. Crayston, the Staff and the Employees.

Respectfully submitted on behalf of the Board,

A handwritten signature in blue ink, appearing to read "J. McDonald", is written over a horizontal line.

President.

Toronto, Ontario,
March 21st, 1960.

Balance Sheet

as at December 31, 1959

Incorporated under the laws
of the Province of Ontario

M A D S E N R E D L A K E

ASSETS

CURRENT ASSETS:

Cash	\$ 975,947.25
Bullion in transit	182,750.84
Accounts receivable	176,005.93
Investments — at cost less amounts written off	65,649.50
(Market value \$48,130.00)	
Materials and supplies — at cost	640,894.38
Prepaid expenses	46,957.14
TOTAL CURRENT ASSETS	<u>\$ 2,088,205.04</u>

SECURITIES AND CASH ON DEPOSIT 26,372.50

PROPERTY, PLANT AND EQUIPMENT — at cost

Mining properties — Red Lake	\$ 1,644,620.91
Buildings, machinery and equipment	\$ 4,717,563.52
LESS: Accumulated depreciation	<u>3,622,712.95</u>
	<u>1,094,850.57</u>
	2,739,471.48

DEFERRED EXPENDITURE:

Development — shaft sinking	\$ 462,297.22
Past service pension costs	<u>162,000.00</u>
	624,297.22

OTHER MINING PROPERTIES:

Mining claims — at cost	\$ 4,780.95
Deferred exploration expenditure	<u>40,124.88</u>
	44,905.83

\$ 5,523,252.07

AUDITORS' REPORT

We have examined the balance sheet of Madsen Red Lake Gold Mines Limited as at December 31, 1959, and the statements of profit and loss and surplus for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

G O L D M I N E S L I M I T E D

LIABILITIES

CURRENT LIABILITIES:

Accounts payable and accrued charges	\$ 235,524.53
Wages payable	40,194.68
Provision for taxes	29,413.69
TOTAL CURRENT LIABILITIES	\$ 305,132.90

CAPITAL STOCK:

Authorized: 3,500,000 shares of \$1.00 each	<u>\$ 3,500,000.00</u>	
Issued and fully paid: 3,499,528 shares	\$ 3,499,528.00	
Less: Discount on shares	1,390,160.50	
	<u>\$ 2,109,367.50</u>	
EARNED SURPLUS	3,108,751.67	5,218,119.17

Approved on behalf of the Board:

S. J. BIRD, Director.

M. MADSEN, Director.

\$ 5,523,252.07

THE SHAREHOLDERS

We report that, in our opinion, the above balance sheet and the attached statements of profit and loss and surplus present fairly the financial position of the Company as at December 31, 1959, and the results of its operations for the year ended on that date.

TORONTO, Canada,
March 8th, 1960.

NEFF, ROBERTSON & STONE,
Chartered Accountants.

MADSEN RED LAKE GOLD MINES LIMITED

OPERATING AND PROFIT AND LOSS STATEMENT

For the Year Ended December 31, 1959

Ore milled			301,999 tons
			Per ton ore milled
Bullion production:			
Gold	\$ 4,001,879.29		
Silver	17,737.54	\$ 4,019,616.83	\$ 13.31
Less: Marketing charges		26,989.67	.09
		\$ 3,992,627.16	\$ 13.22
Operating and administrative costs:			
Mining	\$ 1,550,419.28	\$	5.14
Crushing and milling	446,650.37		1.48
Mine development	535,871.40		1.77
Management and general expenses at the property	320,615.10		1.06
Head office expenses	63,034.80		.21
(Directors' fees \$7,000.00)			
(Legal fees \$250.00)			
		2,916,590.95	\$ 9.66
OPERATING PROFIT		\$ 1,076,036.21	\$ 3.56
Interest earned		40,651.28	.14
		\$ 1,116,687.49	\$ 3.70
Provision for depreciation	\$ 273,712.65	\$.91
Provision for Dominion and Provincial taxes	27,080.00		.09
		300,792.65	\$ 1.00
NET PROFIT FOR THE YEAR		\$ 815,894.84	\$ 2.70

DISTRIBUTION OF GROSS INCOME

For the Year Ended December 31, 1959

		Percentage
GROSS INCOME:		
Bullion	\$ 4,019,616.83	99.00
Interest	40,651.28	1.00
	\$ 4,060,268.11	100.00
DISTRIBUTION:		
Materials, supplies and general operating expenses	\$ 1,308,036.35	32.22
Salaries, wages and employees' benefits	1,635,544.27	40.28
Income taxes	27,080.00	.67
Provision for depreciation	273,712.65	6.74
Net profit	815,894.84	20.09
	\$ 4,060,268.11	100.00

MADSEN RED LAKE GOLD MINES LIMITED

STATEMENT OF SOURCE AND APPLICATION OF FUNDS

For the Year Ended December 31, 1959

SOURCE:

Net profit for the year	\$ 815,894.84	74.67
Add: Provision for depreciation	273,712.65	25.05
	<u>\$ 1,089,607.49</u>	<u>99.72</u>
Profit on sale of bonds	1,950.00	.18
Adjustment of prior years taxes	1,046.19	.10
	<u>1,092,603.68</u>	<u>100.00</u>
TOTAL FUNDS PROVIDED		

APPLICATION:

Dividends paid	\$ 699,905.60	64.06
Additions to buildings and equipment	282,926.74	25.89
Deferred development	126,957.06	11.62
Deferred past service pension costs	162,000.00	14.83
Outside exploration	16,944.95	1.55
	<u>\$ 1,288,734.35</u>	<u>117.95</u>
Less: Balance representing decrease in working capital as set out below	196,130.67	17.95
	<u>\$ 1,092,603.68</u>	<u>100.00</u>

December 31

	1958	1959	
Current Assets	\$ 2,341,460.27	\$ 2,088,205.04	
Current Liabilities	362,257.46	305,132.90	
Working Capital	<u>\$ 1,979,202.81</u>	<u>\$ 1,783,072.14</u>	<u>\$ 196,130.67</u>

STATEMENT OF EARNED SURPLUS

For the Year Ended December 31, 1959

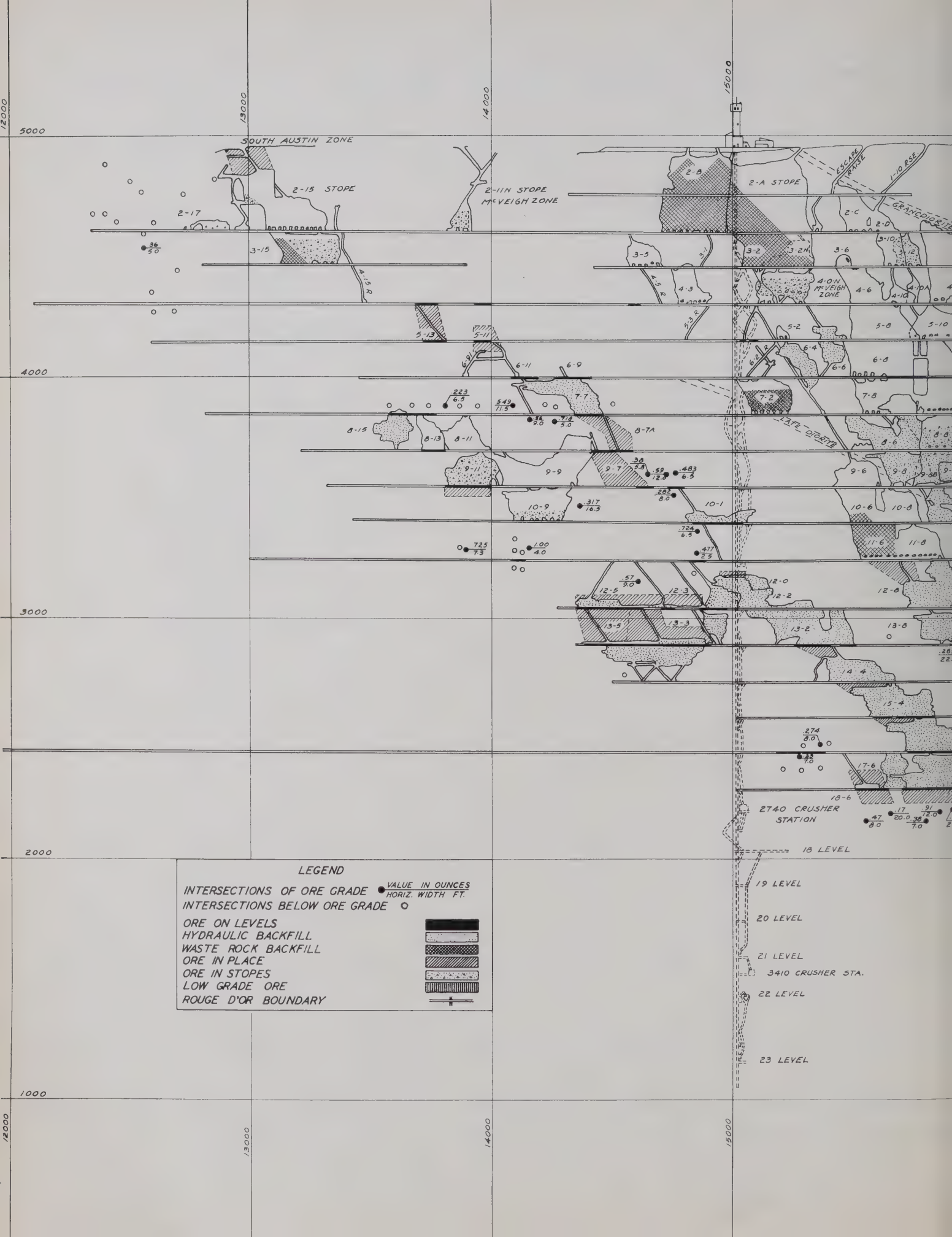
Balance, December 31, 1958		\$ 3,112,801.83
Add: Net profit for the year	\$ 815,894.84	
Profit on sale of investments	1,950.00	
Adjustment of prior years tax provisions	1,046.19	818,891.03
		<u>\$ 3,931,692.86</u>
Deduct: Dividend #34 at 10 cents per share paid June 22, 1959	\$ 349,952.80	
Dividend #35 at 10 cents per share paid December 23, 1959	349,952.80	
	<u>\$ 699,905.60</u>	
Acquisition costs and development expenditure on mining claims abandoned	123,035.59	822,941.19
		<u>\$ 3,108,751.67</u>
Balance, December 31, 1959		

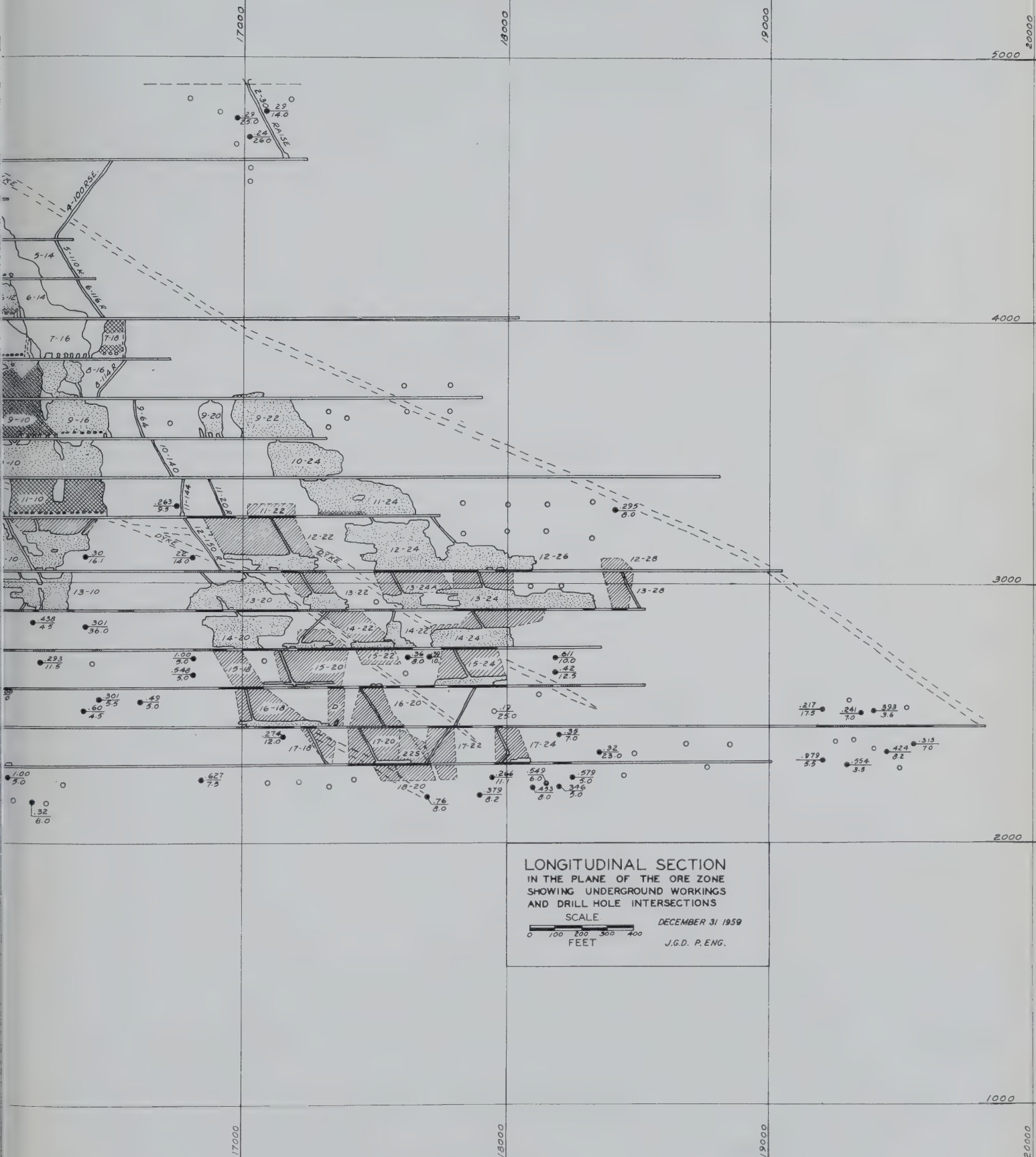
OUR TEN YEAR

	1959	1958	1957	1956
Ounces of gold produced	118,804.674	123,488.940	103,180.955	100,995.03
Tons of ore milled	301,999	302,200	305,300	294,913
Grade of ore milled	\$ 13.31	\$ 13.93	\$ 11.42	\$ 11.85
Average price of gold per ounce	\$ 33.68	\$ 33.94	\$ 33.62	\$ 34.43
Income from gold and silver	\$4,019,616.83	\$4,210,606.14	\$3,485,716.90	\$3,494,386.52
Operating and marketing costs	\$2,943,580.62	\$2,630,449.37	\$2,428,015.39	\$2,247,056.73
Operating profit	\$1,076,036.21	\$1,580,156.77	\$1,057,701.51	\$1,247,329.79
Sundry income	\$ 40,651.28	\$ 42,476.74	\$ 25,518.13	\$ 36,615.21
Emergency gold mining assistance	—	—	—	—
Provision for taxes	\$ 27,080.00	\$ 299,500.00	\$ 75,280.00	\$ 236,000.00
Provision for depreciation	\$ 273,712.65	\$ 271,409.12	\$ 294,339.55	\$ 268,570.10
Net profit	\$ 815,894.84	\$1,051,724.39	\$ 713,600.09	\$ 779,374.90
Net profit per ton	\$ 2.70	\$ 3.48	\$ 2.34	\$ 2.64
Net profit per share	\$.23	\$.30	\$.20	\$.22
Dividends paid	\$ 699,905.60	\$ 699,905.60	\$ 349,952.80	\$ 699,905.60
Dividends paid per share	\$.20	\$.20	\$.10	\$.20
Percentage of dividends paid to cash profits	64.23	52.90	34.72	66.79
Additions to fixed assets	\$ 282,926.74	\$ 168,865.80	\$ 397,152.21	\$ 692,146.80
AT END OF YEAR:				
Fixed assets at cost	\$4,717,563.52	\$4,434,636.78	\$4,265,770.98	\$3,868,618.77
Fixed assets less accumulated depreciation	\$1,094,850.57	\$1,085,636.48	\$1,177,358.16	\$1,074,280.41
Working capital	\$1,783,072.14	\$1,979,202.81	\$1,774,939.20	\$1,631,932.23
Number of employees at December 31	385	357	381	362

OPERATING STORY

1955	1954	1953	1952	1951	1950
104,873.501	82,333.188	82,595.968	67,336.769	61,687.405	65,444.063
295,713	286,246	285,018	304,251	302,227	282,050
\$ 12.30	\$ 9.84	\$ 10.03	\$ 7.61	\$ 7.55	\$ 8.85
\$ 34.54	\$ 34.06	\$ 34.41	\$ 34.21	\$ 36.77	\$ 37.96
\$3,640,101.71	\$2,818,462.90	\$2,857,683.67	\$2,315,979.87	\$2,282,382.77	\$2,496,581.30
\$2,163,462.68	\$2,181,567.78	\$1,988,154.57	\$1,982,155.09	\$1,726,927.52	\$1,512,078.73
\$1,476,639.03	\$ 636,895.12	\$ 869,529.10	\$ 333,824.78	\$ 555,455.25	\$ 984,502.57
\$ 33,730.57	\$ 24,253.37	\$ 11,459.19	\$ 4,718.38	\$ 3,756.45	\$ 3,833.15
—	\$ 426,000.00	\$ 333,000.00	\$ 284,000.00	\$ 175,000.00	\$ 48,300.00
\$ 412,000.00	\$ 242,800.00	\$ 299,100.00	\$ 91,000.00	\$ 138,500.00	\$ 198,300.00
\$ 216,185.87	\$ 203,261.27	\$ 255,584.81	\$ 181,398.74	\$ 211,083.56	\$ 242,412.44
\$ 882,183.73	\$ 641,087.22	\$ 659,303.48	\$ 350,144.42	\$ 384,628.14	\$ 595,923.28
\$ 2.98	\$ 2.24	\$ 2.31	\$ 1.15	\$ 1.27	\$ 2.11
\$.25	\$.18	\$.19	\$.10	\$.11	\$.17
\$ 699,905.60	\$ 419,943.36	\$ 419,943.36	\$ 104,985.84	\$ 349,952.80	\$ 454,938.64
\$.20	\$.12	\$.12	\$.03	\$.10	\$.13
63.72	49.74	46.41	19.75	58.75	64.27
\$ 253,596.25	\$ 216,680.57	\$ 125,612.58	\$ 50,712.79	\$ 83,902.57	\$ 100,623.76
\$3,176,471.97	\$2,922,875.72	\$2,706,195.15	\$2,580,582.57	\$2,529,869.78	\$2,445,967.21
\$ 648,557.66	\$ 609,783.86	\$ 596,364.56	\$ 725,595.03	\$ 844,344.24	\$ 969,649.82
\$2,029,741.84	\$1,910,800.59	\$1,747,158.50	\$1,417,699.05	\$1,068,529.57	\$ 924,545.43
343	317	320	280	302	283





THE ROLE OF GOLD

The subject of gold and its relation to currency is receiving increasing attention. Numerous articles have been written, and speeches delivered, during the past year. Diverse aspects of the subject have been discussed in the usual manner. Bankers and economists, equally skilled, and of high repute, have expressed opposite views.

Some contend that, past experience to the contrary, politico-economic monetary management is the overall solution to the world's currency and trading problems. Others, contemplating the lack of success of governments when trying to solve their internal and usually clearly defined political problems, are exceedingly dubious of this new-found insight into abstruse monetary matters. The latter assert that pressures from the rapidly moving international trading scene will force governmental action. Particularly is this so when a position becomes vulnerable. Specifically, they emphasize that the United States will be forced to change its gold and monetary policy unless it can stop the exodus of gold.

There was one responsible banker who was bold enough to wager bets on the issue. An article to this effect appeared in Life Magazine of May 4th, 1959. It stated:

"Actually, in the past year, there has been a flight from the dollar in the form of a \$2.2 billion drop in our gold reserves caused by foreigners swapping dollars for gold. The head of a Zurich bank recently wagered the chairman of our Federal Reserve Board that the United States would have to devalue the dollar within three years."

The New York Times of February 4th, 1960, had an article captioned "Currency Fears Stir 'Gold Rush' ". It also presented evidence that fears of devaluation were causing a flight from the dollar. In part it stated:

"Fears (or hopes) that the United States eventually will cut the gold content of the dollar have created an international market for "gold paper" with an estimated turnover of \$3,000,000 to \$4,000,000 for each business day.

Speculators, many of them American, are buying claims on gold, deliverable wherever such delivery is legal and physically possible. They are also buying "gold futures" — options to buy gold at fixed prices, three, six and twelve months hence. This they may do on generous margins."

This situation is reminiscent of that period in the early thirties preceding the rise in the price of gold in 1934. It could well be a portent of a changing attitude toward gold, despite the few exponents who advocate the doctrine of managed money. Penetrating remarks on this aspect were made by the late G. B. Shaw:

"The most important thing about money is to maintain its stability, so that a pound will buy as much a year hence or ten years hence or fifty years hence as today, and no more. With paper money this stability has to be maintained by the Government. With a gold currency it tends to maintain itself even when the natural supply of gold is increased by discoveries of new deposits, because of the curious fact that the demand for gold in the world is practically infinite. You have to choose (as a voter) between trusting to the natural stability of gold and the natural stability of the honesty and intelligence of the members of the Government. And, with due respect to these gentlemen, I advise you, as long as the Capitalist system lasts, to vote for gold."

Meanwhile, with the only commodity in the world at a fixed price for the last twenty-five years, it is a certainty that each year brings us closer to the inevitable upward adjustment.

G. B. Shaw excerpt, from Gold by C. H. V. Sutherland.

GOLD, PURE GOLD!



Gold bars worth five billion dollars are stored in these vaults of the Federal Reserve Bank, New York, for safe-keeping. Foreign nations are the depositors. Only 250 million dollars are shown in the photograph. Each bar is worth \$14,000 and weighs 27 pounds.

All gold earmarked "for the account of foreign central banks or governments" is deposited with the Federal Reserve Bank but the official gold stock of the United States is placed in various gold depositories such as Fort Knox, Kentucky, and Denver, Colorado.

When gold is imported and earmarked for foreign accounts, there is no transfer of ownership; hence **no gold inflow**. On the other hand, if gold from the foreign accounts is sold to the United States Treasury, there is **a gold inflow**, in as much as there is a transfer of ownership without a simultaneous gold import.

The United States Reserve at the end of 1959 was 19.5 billion dollars — the lowest since the year 1947.

Report of the General Manager

The President and Directors,
Madsen Red Lake Gold Mines Limited,
55 Yonge Street, 11th Floor,
Toronto 1, Ontario.

Dear Sirs:

The Twenty-Fourth Annual Report covering the operations of Madsen Red Lake Gold Mines for the year ending December 31st, 1959, is respectfully submitted for your consideration.

SUMMARY:

The establishment of the No. 3 Ore Zone in the East section of the mine was confirmed by diamond drilling from the 16th level drift.

The Mine Operating Profit was \$1,076,036.21 or \$3.56 per ton of ore milled. This was \$1.67 per ton lower than in the previous year. The drop in profit was due to the lower grade of ore treated, together with the influence of the above par value of the Canadian dollar, the increased lateral development program, and increased operating costs.

There were no payments received under the Emergency Gold Mining Assistance Act for the year.

The shaft sinking program was concluded at a depth of 3,875 feet from surface. A program of work to develop the new lower levels was commenced.

The grade of the ore reserve was maintained while 261,959 tons of new ore were disclosed. This tonnage of new ore replaced all but 40,040 tons of the ore milled during the year.

PRODUCTION:

The mine produced 301,999 tons of ore which were milled to yield 118,804.674 troy ounces of fine gold and 20,276.860 troy ounces of fine silver. The total value of this bullion was \$4,019,616.83. This was a recovery of \$13.31 per ton of ore milled.

The average Canadian dollar value received per ounce of gold, at \$33.68 was \$0.26 lower than the average price received in the previous year.

The accumulative total production from the mine since milling commenced in August 1938, to December 31st, 1959, amounts to \$46,173,667.60 from the 4,603,398 tons of ore put through the treatment plant. The average recovery in this period of time was \$10.03 per ton of ore milled.

ANALYSIS OF OPERATING COSTS:

Mining costs were up \$0.61 per ton milled during the year due to the increased tonnage of ore broken and the smaller size of ore bodies being mined, as well as, the operation of an additional surface hoist to develop the lower section of the mine.

The amount of lateral development work undertaken on the completion of shaft sinking caused an increase of \$0.28 per ton milled in the Development and Exploration Account.

The establishment of employee pension plans caused an increase in the Mine General and Head Office Expense Accounts, through the combined write-off of one-tenth of the prepaid past service payment and the current service contributions, to the extent of \$43,351.90 or \$0.144 per ton of ore milled.

A decrease of \$0.03 per ton milled occurred in the Marketing Charges due to the selling of our gold in the free market.

The foregoing and other changes in costs resulted in the Total Operating Costs "per ton of ore milled" being increased by \$1.041 to \$9.747 after \$126,957.06 of the monies spent for shaft work were transferred to a Deferred Development Account.

The details of the operating costs are outlined in the following table:

Report of the General Manager (Continued)

		Total Cost	Cost per Ton Milled	Cost per Ounce Produced
Development and Exploration	\$662,828.46			
Less: Portion Deferred	126,957.06	\$ 535,871.40	\$ 1.774	\$ 4.511
Stope Preparation		102,167.47	.338	.860
Stoping		995,917.01	3.298	8.383
Mucking, Trimming, & Hoisting		452,334.80	1.498	3.807
Crushing and Conveying		84,915.93	.281	.715
Milling		361,734.44	1.198	3.045
Mine General Expense		320,615.10	1.062	2.699
Head Office Expense		63,034.80	.209	.530
Marketing Charges		26,989.67	.089	.227
TOTAL OPERATING COSTS		\$ 2,943,580.62	\$ 9.747	\$ 24.777

MINE DEVELOPMENT:

The following table of statistics gives the total footages of development work completed during the year and shows, for comparative purposes, the footages completed in the two previous years. The total footages of development work carried out to date are also included in the summary:

	Dec. 31st, 1957	Dec. 31st, 1958	Dec. 31st, 1959	Total to Date
Shaft Sinking and Station Cutting (feet)		761.0	406.0	4,994.0
Slashing Shaft Pillar (feet)	2,278.0	471.0	12.0	2,876.0
Crosscutting (feet)	353.0	791.0	2,535.0	22,273.0
Drifting (feet)	3,682.0	1,482.0	2,975.0	118,843.0
Raising (feet)	2,691.0	3,579.0	4,888.0	51,829.0
Diamond Drilling (feet)	56,588.0	45,458.0	54,830.0	1,194,535.0
Surface Drilling (feet)	350.0	1,427.0	—	126,366.0
Drawpoints (Units)	14.0	28.0	24.0	426.0

The shaft deepening program was stopped in May when the bottom of the shaft had been advanced 364.0 feet to reach a vertical depth of 3,875.0 feet. The 23rd level station was cut at the 3,775 foot horizon.

The last remaining portion of the pillar to complete the enlargement of the shaft from three compartments to five compartments was excavated. The Friction Hoist to service the new cage and counterweight compartments was put into service during June and a program to develop the new lower levels was commenced immediately.

Of the work involved in this program the crosscuts on the 18th, 19th, 20th, 21st, and 22nd levels connecting the shaft stations to the main crosscuts were driven southeasterly to join with the location of the proposed main crosscut on each of these levels. The main crosscuts were driven north from these points to provide space for the locations of the ore and waste pass raises and for the connection to the entrances from the shaft manway.

The equipment for the cage loading pockets at the 21st and 23rd levels was installed. Waste pass raises from these loading pockets were driven up to the 18th and 22nd levels respectively.

The main crosscuts on the 18th and 19th levels were driven 838.0 feet and 329.0 feet respectively. The East drift was started from the South end of the crosscut on the 18th level and was advanced 111.0 feet.

A crosscut from the shaft station on the 3,410 Crusher Station level was driven to the location of the proposed 3,410 Crusher Room. The ore pass raise from the Crusher Room to the 21st level was completed.

In the older section of the mine the 16-East drift was extended for 842.0 feet to open the new No. 3 Ore Zone. When good ore values were obtained in the diamond drill holes put out from this heading, drifting was started in the East drifts on the 14th and 17th levels to penetrate the areas above and below the 16th level. These two latter headings were driven 60.0 feet and 620.0 feet respectively before the end of the year.

IN NEVER-ENDING SEARCH



The scarcity of gold and its indestructibility have set it apart from all other metals. While world gold production for the year 1959 was 32.6 million fine ounces (exclusive of the U.S.S.R.), just 4.1 million below the all-time peak year 1940, the demand for this precious metal is increasing. Apart from the fact that world gold monetary reserves lag

way behind in relation to the volume of paper currencies, private hoarding continues at an accelerated rate. It has been estimated that 11.5 billion dollars in gold are in the hands of private hoarders. At least one-quarter of this amount is supposedly held in France by all classes of the population.

Report of the General Manager (Continued)

In stope preparation work 274.0 feet of crosscutting, 1,343.0 feet of drifting, and 3,717.0 feet of raising were completed.

A total of 54,830.0 feet of exploratory diamond drilling was completed underground during the year.

MINING:

The details of the mining conducted during the year are as follows:

In the Austin Zone:

The mining of the 6-6, 10-10, 12-10, 12-26, 13-8, and 13-10 ore bodies was completed.

The mining operations were continued in the 12-8, 12-12, 12-20, 13-22, 13-24, 13-24A, 14-24, and 14-24A ore bodies.

The preparation of the 5-6, 7-6, 14-20A, 14-22, 15-24, and 16-18 ore bodies was completed and mining operations were commenced in these stopes.

The preparation of the 15-20, 17-20, and 17-24 ore bodies was started and was still in progress at the year end.

In the South Austin Zone:

The mining of the 8-15, 9-11, 12-0, 13-0, 14-1, 17-8, and 17-8W ore bodies was completed.

The mining operations were continued in the 12-2 and 16-6 ore bodies.

The preparation of the 12-3, 12-5, 13-1, 13-3, 13-5, and 17-6 ore bodies was completed and mining operations were commenced in these stopes.

The preparation of the 6-11 ore body was started.

In the McVeigh Zone:

The ore in the 3-2N ore body was broken, but still remains to be drawn.

The backfilling of current mine working places with deslimed mill tailings was continued. In the year an additional 124,750 tons of this material were placed in the mine by hydraulic methods. This brings the total of this type of fill material to be used up to 709,950 tons.

The accompanying longitudinal vertical section of the mine shows the position of the ore bodies located and all the stopes in which mining has been performed to date.

Ore Developed:

The extensions to present working places and diamond drilling in other locations disclosed 261,959 tons of ore which was taken into the Ore Reserve to partially replace the 301,999 tons of ore milled during the year.

Diamond drilling from the extension of the 16-East drift confirmed the establishment of a new ore zone in that section of the mine. To date four ore bodies have been indicated by diamond drilling. These contain an estimated 56,000 tons of ore averaging 0.28 ounces per ton between the 17th to 15th levels. This ore was not included in the Ore Reserve figure as at the end of the year.

ORE RESERVE:

The calculated Ore Reserve was as follows:

BLOCK	December 31st, 1958			December 31st, 1959		
	Tonnage	Ounces	Grade	Tonnage	Ounces	Grade
7th Level to Surface	25,230	7,340	0.291	28,930	9,112	0.315
11th Level to 7th Level	27,010	7,984	0.295	57,200	16,777	0.293
From 50 feet below						
17 Level to 11th Level	494,220	166,963	0.338	413,040	140,845	0.339
Broken Reserve	97,730	30,296	0.310	104,980	32,544	0.310
TOTAL RESERVE	644,190	212,583	0.330	604,150	199,278	0.330

All high assays were reduced to 1.00 ounce and a dilution factor of 10% was allowed in the calculation of grade and tonnage of the ore reserve.

Report of the General Manager (Continued)

MILLING:

The details of the mill operation are shown in the following summary. For comparative purposes the details of the two previous years' operations and for the total operating life of the mine are also shown.

	YEAR ENDING			August 11th, 1938 to Dec. 31st, 1959
	Dec. 31st, 1957	Dec. 31st, 1958	Dec. 31st, 1959	
Dry Tons Treated	305,300	302,200	301,999	4,603,398
Percentage Operating Time of Total Time ---	98.16	97.64	97.42	95.77
Tons Treated Per Calendar Day	836.4	827.9	827.4	589.2
Average Gold Assay Heads, Troy Ozs.	0.3541	0.4310	0.4190	0.3001
Average Gold Assay Tails, Troy Ozs.	0.0161	0.0224	0.0256	0.01745
Percentage Recovery	95.45	94.81	93.90	94.18

During the year difficulty was experienced in extracting the extremely fine gold which is disseminated throughout the ore. This had a downward effect on the average percentage recovery for the year.

BUILDINGS, MACHINERY, AND EQUIPMENT:

The installation of the electrical power cables for the new hoists was completed. The control wiring for the cage hoist was put in place and connected for operation.

The new substation was put into service.

The hoisting ropes to handle the double deck cage and counterweight vehicles respectively operating in the No. 5 and No. 4 shaft compartments were installed on the cage friction hoist. This hoist was put into service during the month of June.

The following charges were made to the Buildings, Machinery and Equipment Accounts during the year:

BUILDINGS, MACHINERY AND EQUIPMENT:

Concrete Headframe	\$ 3,914.24
Friction Hoist and Installation	61,003.52
Power and Hoist Control Signal Cables	21,939.19
Mine Residences	18,192.37
Miscellaneous	287.55
Total	<u>\$105,336.87</u>

EQUIPMENT ACCOUNT:

Hoist Ropes and Installation	\$ 74,426.02
Rock Drills	18,123.85
Electric Slusher Hoists	14,565.37
Mine Cars	15,141.81
Alimak Raise Machine	12,484.43
Diesel Locomotive, 38 H.P.	8,271.17
Power Cables	8,726.27
Distribution Transformer	5,300.00
Support Steel for Crusher Room	5,982.46
Loading Pocket (freight)	1,755.15
Installation of Shaft Vehicles	1,670.73
Ventilation Equipment	2,863.50
Sump Pump	889.27
Shop Equipment	3,876.26
Assay Office Balance	1,038.80
Engineering Equipment	848.83
Office Equipment	1,625.95
Total	<u>\$177,589.87</u>

Report of the General Manager (Continued)

GENERAL:

Voluntary contributory pension plans for both the hourly wage earners and staff members were instituted on the first day of the year. These plans provide for past service, as well as, current service pensions. The Company will be bearing the full cost of all past service pensions and has deposited \$180,000.00 in a Trust Fund with the Guaranty Trust Company of Canada to cover the cost of these past service pensions. This sum will be written-off to operating expense over a ten year period. The Company has contributed along with the employees towards the cost of current service pensions. This year \$23,842.50 was deposited in the Trust Fund to cover current service pensions.

There was an average of 385 employees on the payroll at the end of December. In addition, there was also a contract diamond drill crew of 11 men working in the mine.

Statistics showing the distribution of the monies spent for wages, pensions, supplies and equipment to operate and maintain the mine during 1959 are appended.

In conclusion, I wish to thank the Head Office Staff and Mine Department Heads, their staffs and their employees for their cooperation throughout the year.

I would also like to thank the President and Directors for their continued support and guidance in the operation of the mine.

Yours truly,

"E. G. CRAYSTON",

General Manager.

Madsen, Ontario,
March 10th, 1960.

OUR CANADIAN HERITAGE

Behind the setting of a mining townsite is often the story of a dream come true; yet it is the product of much more than dreaming. Between the hopes of the prospector and final success the road is rarely smooth. In many cases it is filled with frustration and delay. To that fantastic breed of adventurers, ever pushing back the frontier, Canada owes much of her present position of wealth and status among the leading countries of the world.

The headframe etched against the sky may be taken as a beacon of light leading to the door of opportunity across our broad land. This door is open to those who are inspired by hope and imbued with the spirit of adventure and courage. Such men of vision and energy, constantly searching beyond present horizons, are responsible for mining and its associated activities rapidly becoming Canada's principal industry. To-day, mining is second only to agriculture in its contribution to the national income.

As compared with so many countries chiefly dependent on the talents of human resources, this land of vast natural resources is a rich heritage, indeed. Only more significant, as a treasured possession, is our heritage of a free democratic society.

Twenty-five Cents

Editorial Correspondence

What Lake Champlain Producers See Here in Future Prospects

Lake Champlain producers are looking at the Canadian situation with a keen eye. The U.S. attitude toward existing rights to the present is a factor in the future. The Northern Miner is not a party to the dispute.

One point which should be considered is the recent additions to the original contract held by the Canadian Mines and Development Commission. The 22nd contract, which will enable both countries to estimate production to 1931-1932, at present rates, tend to the same period for these two countries.

The new contract, however, has a lower price for product than the original.

In the meantime, the situation is not so simple. The total of 10 producers in the area, are to make out the yellow cards at record rates. Some of the mines have been restricted to the amount of shipment they can make per month against their respective contracts but amounts in excess of these maximums are being shipped.

Three of the companies, however, with two mines, and the giant Canadian National, and a third operation, have settled down to normal operations and are now concentrating on the same.

(Continued on Page Four)

New Deep Zone At Madsen R.L.

What looks like the top of a whole new ore zone is currently being picked up at depth at Madsen Red Lake Gold Mines, The Northern Miner learns.

It has now been cut in four drill holes over a length of 300 ft. on the 16th level, from a heading that has been pushed some 4,500 ft. east of the shaft into virgin country.

"The situation here is promising, particularly with respect to possibilities at deeper horizons", Dr. E. G. Bishop, the company's consulting geologist, told The Northern Miner.

Madsen management has recognized for some years that a 3rd lens of favorable tuff occurs east of the Austin No. 2 zone. (The latter has been the mainstay of this Red Lake gold mine in recent years.)

The possibility of finding a 3rd (Continued on Page Four)

Natural Industry Grows Rapidly From Natural Gas Production

Canada is in the sulphur business to stay — and in a major way.

As a matter of fact, current developments promise that this country may quickly become one of the world's leading suppliers of this element so essential and basic to numerous industries.

Long a modest producer from the conventional raw products of mining — pyrites and pyrites — the big-time status being assumed derives from the phenomenal growth of recent years in Western Canada, oil and gas industries. As things are happening there — things that many mining people are only vaguely aware of.

What does this growth mean? For one thing it probably means that the production from natural mining or mineral sources will have a fight on its hands to hold its markets in Western Canada.

For another it means that Canada is heading rapidly to the position of the world's second largest sulphur

producer of about 2,700 tons of elemental sulphur in addition to other by-products recovered in the refining of natural gas. The world's new production of over 4,500,000 tons per year, bringing total to over 5,500,000 tons from natural gas sources combined.

Of the above estimate, those listed in the probable category were rated output of close to 1,000 tons of elemental sulphur. The probable category includes 10 million with several of these in the 1,500,000 to 2,000,000 ton range.

The two largest projects, both of which would be rated at over 1,000 tons of sulphur output, are the sulphur of Shell and the sulphur of Canada. One of these would produce sulphur where drilling for last year's estimated "sour" gas up to 12,000 cu. ft. per day



On Inade Level

After a long drive west on the U.S. 5th level, Madsen Mining Co. has entered the downward extension of the No. 5 orebody exposing high-grade copper ore. Dr. M. D. Knevel, geologist, tells The Northern Miner, this level, a length of 70 ft. has been opened in the drift with showings of nearly pure chalcophyllite. Massive chalcophyllite has a theoretical copper content of 34% copper but, over a mining width and "allowing" for dilution, grade is expected to run about 1% copper. The chalcophyllite vein ranges in width from two feet to as much as 10-12 ft. in width.

The top of the No. 5 orebody was encountered in the west drift on the 5th level. Drilling below that horizon extended the length to some 200 ft. and indicated upward of 5,000 tons of high-grade ore. Now that the No. 5 orebody has been

located and Inland Affairs meets here this month. Hearings will be held from June 27 through July 1, and a series is on the agenda for Tuesday, June 28. Schedule to appear on behalf of the silver producers are various leaders from the U.S. industry.

Mexico and Peru have already sent in their representations. There is feeling here that Canada should join, too, on the ground that U.S. lead-zinc qualifications have dropped production and sales and a better figure for silver would be some cent per ounce.

(Continued on Page Eight)

gray porphyry orebody occurs.

The decision to start drilling out on the 13th level, one of the deepest levels to be opened by the main No. 2 incline shaft. The drive will begin from the north-west end of the haulage drift here, and in the vicinity of the shaft station. No time

(Continued on Page Nine)

North American R.M. Seeks From Contracts Presser Development

Following satisfactory completion of metallurgical tests work North American R.M. is now discussing the possibilities of financing into production its Texas area iron property, according to Andrew Robert, president.

Tests by Quebec Metallurgical Industries, the Ontario Research

their first taste of the results of natural gas developments. Producers are also viewing their product as competitive in Washington, Oregon, Idaho and even Alaska, over the raw sulphur imported into these states from the Gulf of Mexico.

P. Production Now

The best of the matter is that the previously talked potential sulphur production from natural gas treatment is no longer in the realm of fancy. It is here now, with oil and hard economic facts to back it up, and with further plants already planned or started that could raise the current level some sixfold or more with the foreseeable future.

A survey of water, natural gas treatment plants shows that there are now five plants in operation having an installed capacity to turn out some 210,000 tons per day of elemental sulphur, or roughly 75,000 tons per year. These plants include the British American processing plant at Alton, Ontario which is the largest to date and is rated at 1,000 short tons per day. Next in line in point of size is the Taylor plant of the Jefferson Lake Chemical Co. of

option, but the big question is: Is it correct?

The other big question is: Will the western producers going to do their leg and growing overseas, "unavailable" output? For the matter is that if the gas companies are to remain in the gas business, must also produce sulphur as a by-product.

For readers not familiar with the industry, a good deal of the production of sulphur is of the "wet" type, involving a number of substances must be removed in order to make gas saleable. One of these substances is hydrogen sulphide, itself a gas, and is commonly known as "rotten gas", having a vile odor in addition to a highly corrosive action on metals as a transmission pipeline, the formation of sulphuric acid. For reason, as well as the offensive, it must be removed as quickly as possible. The desulphurizing process, the production of elemental sulphur.

I. W. C. Production

Although broken down cost figures for the gas producers are pretty well secret, it has been estimated that

On Inside Pages	
Deep Zone launches widespread exploration	Page 17
Trailing encountered in polish drilling	Page 16
Canadian sulphur industry assuming big-time status	Page 7
Western ready for shaft sinking on nickel group	Page 17
May expects to pay	

General Summary of Expenditures 1959

Wages and Salaries:

Wages and Salaries	\$ 1,546,248.93	
Pension Plans (Past and Current Service)	203,842.50	
Holidays with Pay (Hourly Rated Employees)	30,190.12	\$ 1,780,281.55

Contracts:

Boland Development	\$ 156,745.82	
Fathom Drilling	68,121.48	224,867.30

Supplies:

Hardware	\$ 95,058.56	
Iron Steel, etc.	136,657.75	
Tungsten Carbide Bits and Steel	76,109.68	
Grinding Balls	54,561.37	
Wire, Cable, etc.	72,896.62	
Electrical Supplies	127,844.95	
Equipment	112,920.40	
Pipe Fittings and Hose	60,800.51	
Rock Drills and Repairs	35,081.41	
Crusher Repair Parts	24,924.41	
Mill Repair Parts	25,975.75	
Building Supplies	27,544.45	
Miscellaneous Supplies and Services	66,006.12	
Power (Plant Operating and Heating)	147,388.97	
Timber	118,384.86	
Explosives	75,518.22	
Chemicals	74,055.76	
Fuel Oil Gasoline and Lubricants	17,183.13	
Transportation	80,418.39	
Food Products	56,231.36	1,485,562.67

Insurance:

Fire, Public Liability, Use and Occupancy Bond Bullion, Boiler, Truck and Tractor	\$ 14,221.77	
Sun Life Group	36,957.13	
Workmen's Compensation and Silicosis	99,666.30	150,845.20

Sub-Total \$ 3,641,556.72

Taxes: Dominion, Provincial, Corporation, etc. 116,348.10

TOTAL EXPENDITURES \$ 3,757,904.82

Income Tax collected from Employees and remitted to Federal
Government \$ 139,201.00

